

This listing of claims will replace all prior versions, and listings, of claims in the application:

II. Listing of Claims

Claim 1 (Currently amended): A taut mooring system for a jack-up platform which includes jacking mechanisms and associated legs for raising [[the]] a hull of the jack-up platform above the surface of a body of water to a fixed position supported by the legs, the taut mooring system comprising mooring line connections that are radially spaced in plan on the extremities of the hull; anchors that are radially spaced around the jack-up platform consistent with the radial spacing of the connections[[;]], pretensioned taut mooring lines that are radially attached between the anchors and the connections, and a tensioning system for the mooring lines, whereby the mooring lines induce forces against the jack-up platform counteractive to deflective forces experienced by the jack-up platform when the hull is in the fixed position, the fixed position also being defined by the legs being engaged with a subsea surface.

Claim 2 (Previously amended): The invention of claim 1 wherein said mooring line connections are attached to the hull of the jack-up and the tensioning system comprises the existing jacking mechanisms used to raise the hull of the jack-up above the surface of the water.

Claim 3 (Original): The invention of claim 2 wherein said jacking mechanisms comprise pinion gear drives mounted to the hull working in combination with one or more gear racks fixed to each leg.

Claim 4 (Original): The invention of claim 1 wherein said radially spaced mooring lines comprise a single line extending from each hull extremity of said jack-up, and wherein said lines

are radially aligned approximately with the center point of the jack-up and disposed on approximately equal angles one from another.

Claim 5 (Original): The invention of claim 1 wherein said radially spaced mooring lines comprise multiple lines extending in sets from each hull extremity of said jack-up, and wherein said lines are symmetrically disposed in extending from each extremity of said jack-up so that the resultant forces from the combination of each set of multiple lines at each extremity are radially aligned approximately with the center point of the jack-up and disposed on approximately equal angles one from another.

Claim 6 (Original): The invention of claim 2 wherein said radially spaced mooring lines comprise multiple lines extending in sets from each hull extremity of said jack-up, and wherein said lines are symmetrically disposed in extending from each extremity of said jack-up so that the resultant forces from the combination of each set of multiple lines at each extremity are radially aligned approximately with the center point of the jack-up and disposed on approximately equal angles one from another.

Claim 7 (Original): The invention of claim 1 wherein said anchors are suction piles.

Claim 8 (Original): The invention of claim 2 wherein said anchors are suction piles.

Claim 9 (Original): The invention of claim 4 wherein said anchors are suction piles.

Claim 10 (Original): The invention of claim 5 wherein said anchors are suction piles.

Claim 11 (Original): The invention of claim 6 wherein said anchors are suction piles.

Claim 12 (Previously amended): The invention of claim 1 wherein said mooring lines are Kevlar cables.

Claim 13 (Previously amended): The invention of claim 2 wherein said mooring lines are Kevlar cables.

Claim 14 (Previously amended): The invention of claim 4 wherein said mooring lines are Kevlar cables.

Claim 15 (Previously amended): The invention of claim 5 wherein said mooring lines are Kevlar cables.

Claim 16 (Previously amended): The invention of claim 6 wherein said mooring lines are Kevlar cables.

Claim 17 (Original): The invention of claim 1 wherein said mooring lines are connected between said anchors and said jack-up at an angle within the range of 20 degrees to 40 degrees from the horizontal.

Claim 18 (Original): The invention of claim 2 wherein said mooring lines are connected between said anchors and said jack-up at an angle within the range of 20 degrees to 40 degrees from the horizontal.

Claim 19 (Original): The invention of claim 4 wherein said mooring lines are connected between said anchors and said jack-up at an angle within the range of 20 degrees to 40 degrees from the horizontal.

Claim 20 (Original): The invention of claim 5 wherein said mooring lines are connected between said anchors and said jack-up at an angle within the range of 20 degrees to 40 degrees from the horizontal.

Claim 21 (Original): The invention of claim 6 wherein said mooring lines are connected between said anchors and said jack-up at an angle within the range of 20 degrees to 40 degrees from the horizontal.

Claim 22 (Original): The invention of claim 1 wherein said tensioning system comprises an auxiliary jacking unit for use with each leg of the jack-up and wherein said mooring line connections are attached to said auxiliary jacking units to function as the tensioning system for said mooring lines.

Claim 23 (Original): The invention of claim 22 wherein said jacking mechanisms comprise pinion gear drives mounted to the hull working in combination with one or more gear racks fixed to each leg.

Claim 24 (Original): The invention of claim 22 wherein said radially spaced mooring lines comprise a single line extending from each leg of said jack-up, and wherein said lines are

approximately radially aligned with the center point of the jack-up and disposed on approximately equal angles one from another.

Claim 25 (Original): The invention of claim 22 wherein said radially spaced mooring lines comprise multiple lines extending in sets from each leg of said jack-up, and wherein said lines are symmetrically disposed in extending from each leg of said jack-up so that the resultant forces from the combination of each set of multiple lines at each leg are approximately radially aligned with the center point of the jack-up and disposed on equal angles one from another.

Claim 26 (Original): The invention of claim 22 wherein said anchors are suction piles.

Claim 27 (Original): The invention of claim 23 wherein said anchors are suction piles.

Claim 28 (Original): The invention of claim 24 wherein said anchors are suction piles.

Claim 29 (Original): The invention of claim 25 wherein said anchors are suction piles.

Claim 30 (Previously amended): The invention of claim 22 wherein said mooring lines are Kevlar cables.

Claim 31 (Previously amended): The invention of claim 23 wherein said mooring lines are Kevlar cables.

Claim 32 (Previously amended): The invention of claim 24 wherein said mooring lines are Kevlar cables.

Claim 33 (Previously amended): The invention of claim 25 wherein said mooring lines are Kevlar cables.

Claim 34 (Original): The invention of claim 22 wherein said mooring lines are connected between said anchors and said jack-up at an angle within the range of 20 degrees to 40 degrees from the horizontal.

Claim 35 (Original): The invention of claim 23 wherein said mooring lines are connected between said anchors and said jack-up at an angle within the range of 20 degrees to 40 degrees from the horizontal.

Claim 36 (Original): The invention of claim 24 wherein said mooring lines are connected between said anchors and said jack-up at an angle within the range of 20 degrees to 40 degrees from the horizontal.

Claim 37 (Original): The invention of claim 25 wherein said mooring lines are connected between said anchors and said jack-up at an angle within the range of 20 degrees to 40 degrees from the horizontal.

Claim 38 (Original): The invention of claim 22 further comprising connections for linking said auxiliary jacks to said hull wherein said auxiliary jacks can be used to increase the jacking capacity of the jack-up when elevating the hull above the surface of the body of water.

Claim 39 (Original): The invention of claim 23 further comprising connections for linking said auxiliary jacks to said hull wherein said auxiliary jacks can be used to increase the jacking capacity of the jack-up when elevating the hull above the surface.

Claim 40 (Original): The invention of claim 24 further comprising connections for linking said auxiliary jacks to said hull wherein said auxiliary jacks can be used to increase the jacking capacity of the jack-up when elevating the hull above the surface.

Claim 41 (Original): The invention of claim 25 further comprising connections for linking said auxiliary jacks to said hull wherein said auxiliary jacks can be used to increase the jacking capacity of the jack-up when elevating the hull above the surface of the body of water.

Claims 42-47 (Canceled)

Claim 48 (Newly added): A jack-up platform for off-shore use, the jack-up platform having a hull movable from a first position to a second position, the jack-up platform comprising:

a plurality of jacking mechanisms;

a plurality of legs movably engaged with the plurality of jacking mechanisms, the legs and jacking mechanisms being operable for moving the hull from the first position to the second position, the first position being on a surface of a body of water and the second position being vertically spaced from the surface of the body of water, the plurality of legs being engaged with a subsea surface when the hull is in the second position to support the hull in the second position; and

a plurality of mooring lines operatively secured to and extending from the hull, the mooring lines being taut and operatively engaged with a subsea surface when the hull is in the second position, whereby the plurality of mooring lines induce forces against the jack-up

platform counteractive to deflective forces experienced by the jack-up platform when the hull is in the second position.

Claim 49 (Newly added): The jack-up platform of claim 48 wherein each of the plurality of mooring lines is operatively secured to the hull via a mooring line connection.

Claim 50 (Newly added): The jack-up platform of claim 48 wherein each of the plurality of mooring lines is operatively engaged with the subsea surface via an anchor.

Claim 51 (Newly added): The jack-up platform of claim 50 wherein the anchors are suction piles.